# CVACESIDEGE Winter 2002 New Jersey Department of Environmental Protection Winter 2002 Output Description Output Description Desc

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#### NJDEP EXPANDS DROUGHT WARNING TO NORTHEAST AND NORTHERN COAST

Due to continued dry weather and declining reservoir and stream flow levels, Department of Environmental Protection (DEP), Acting Commissioner Bradley M. Campbell expanded the existing regional drought warning to include seven additional counties — Bergen, Essex, Hudson, Monmouth, Morris, Ocean and Passaic counties on January 24, 2002.

"Water supplies are at alarmingly low levels for this time of year," said Campbell. "We need everyone to take common-sense steps to reduce water use and avoid water waste."

Rainfall the past three months has been less than 50 percent of normal, so precipitation over the next several weeks is key to replenishing streams and reservoirs impacted by the long-term precipitation deficit, said Campbell. Rainfall last year was below normal for 10 out of 12 months, averaging about nine inches below the long-term average (1895-2000.) It was the driest year since the mid-Sixties, and the fifth driest year since 1895.

A drought warning urges voluntary conservation but allows the state the authority to order transfers of water among suppliers and other temporary modifications including reducing flow rates in rivers to preserve reservoir levels, if necessary. If conditions worsen, DEP could recommend the Governor declare a water emergency, which may include mandatory restrictions. However, such mandatory restrictions on residential use do not save as much water in the winter when there is little

(DROUGHT continued on page 2)



Landscaping for water conservation is one way NJ residents and businesses can help conserve water. See page 5 for more on low input landscaping.

#### watershed focus

is a publication concentrating on watershed management, stormwater and nonpoint source pollution management issues in New Jersey. Send comments and subscription requests to:

> New Jersey Department of Environmental Protection Environmental Planning and Science Division of Watershed Management PO Box 418 Trenton, NJ 08625-0418 609-292-2113 khoffman@dep.state.nj.us www.state.nj.us/dep/watershedmgt

James E. McGreevey, Governor
Bradley M. Campbell, Acting Commissioner
Leslie McGeorge, Assistant Commissioner
Mary T. Sheil, Director
Debra Hammond, Assistant Director
Kerry Kirk Pflugh, Bureau Chief
Kyra Hoffmann, Editor
Erin Brodel, Designer

#### Contributors:

Ambrosia Collier, Colleen Gould, Patricia L. Hamilton and Susan L. Scibilia

This newsletter is published with funding provided by the U.S. Environmental Protection Agency under Section 319 of the federal Clean Water Act.

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#### New Jersey's 5 Water Regions and 20 Watershed Management Areas



#### **SPONSOR A PROJECT WET WORKSHOP**

Project WET offers workshops for educators and water resource specialists interested in educating others about the importance and value of water. There is no greater gift of life than clean water. Project WET is one of the most valuable and useful resources a teacher can be given to educate our future leaders about the value of water. It is our responsibility as water resource managers and adults to ensure that students today appreciate and understand the importance of water in their everyday life. Project WET begins with educating the teachers who can in turn reach more than 100 students each annually. It is our goal to teach them about where their drinking water comes from, how it gets clean and where it goes after we use it.

Project WET relies on our partners like the water and wastewater utilities to provide our workshops with a well-rounded perspective with first-hand experience. The NJ Project WET Program is cosponsored by the NJ Dept. of Environmental Protection and the Wetlands Institute. However, it relies on sponsors like water companies and water and wastewater utilities who can host a one-day workshop. This year United Water, Inc., Middlesex County Utilities Authority and Atlantic County Utilities Authorities are sponsoring workshops at their facilities and giving tours of their plants.

The Project WET Curriculum and Activity Guide is only available to teachers through attending a workshop. Our workshops are usually six hours and held on a weekday or Saturday. The cost of the guide is only \$15. Sponsors can opt to pay for the guides and/or lunch for participants. Sponsored workshops are usually promoted through the media and receive positive newspaper exposure. Project WET is a perfect education and outreach effort that watershed and water organizations can use to educate the general public.

There are countless benefits to sponsor a workshop and to share your expertise with teachers. The NJ Project WET Program is always looking for new and interested sponsors to host workshops. To become a sponsor, please contact Colleen Gould at (732) 292-4672 or cgould@superlink.net

#### **DROUGHT**

(continued from page 1)

outdoor water use. Campbell signed the Drought Warning Declaration after a review of the latest drought monitoring data and consultation with major water suppliers.

On January 24, 2002, the date of the declaration, water supplies in the state were exceptionally low. Combined, the four reservoir systems in the Northeast (United Water Co., Jersey City, Newark and North Jersey District Water Supply Commission) were 42.9 percent full, which is 37.2 percent below the historic average for this time of year. In comparison, the combined systems were 50.6 percent full, or 20 percent below average, on November 20 when the drought warning for the first three regions was declared. Fall was exceptionally dry, with October and November being the driest such period on record.

"While the immediate problem is low rainfall, [this] action underscores the importance of strengthening long-term protection of waters that serve as drinking water sources," Campbell said. "In many cases, that protection is long overdue."

(MORE ON DROUGHT continued on page 3)

#### **MORE ON DROUGHT**

(continued from page 2)

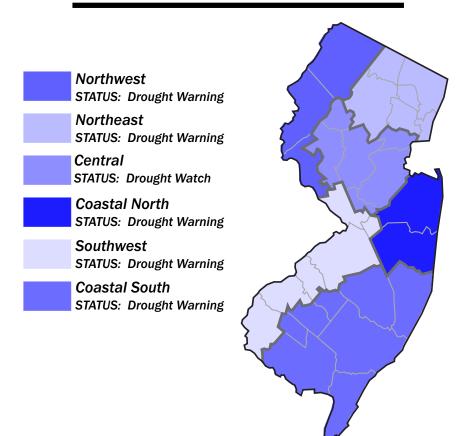
The declaration includes reducing some reservoir releases and passing flow requirements for rivers, which could save millions of gallons per day in the reservoir systems. The release reductions are for the Wanaque, Point View, Boonton and Split Rock reservoirs. Reductions in the passing flows were made for the Passaic, Pompton, Ramapo, Raritan, Saddle, Shark, Jumping Brook, Manasquan and Metedeconk rivers.

With the declaration of drought warning for the Northeast and Coastal North regions, five of the state's six drought management regions are in drought warning. In the other three regions, the Northwest, Southwest and Coastal South, drought warnings were declared on November 21.

A drought watch, the first phase, exists in the Central region in the Raritan River Basin, which has higher reservoir levels. The combined level of the Spruce Run and Round Valley reservoirs is now 82.6 percent full, compared to the historic average of 90.4 percent full at this time. Morris County is in the Northeast drought warning region except for four municipalities—Chester Borough and Chester, Mount Olive and Washington townships—which are in the Central drought watch region. Precipitation from October through April provides the bulk of recharge to aquifers, which augment stream flows, allowing the reservoirs to refill.

For information on how to conserve water, go to DEP's drought web site at NJDrought.org or call 1-800-4-ITS-DRY. The site also links to the USGS web page and the Delaware River Basin Commission.

#### **NEW JERSEY DROUGHT REGIONS**



# WATER CONSERVATION TIPS

Repair leaky toilets. A leaky toilet can waste up to 200 gallons of water per day. A toilet leak can be detected by adding a few drops of food coloring to the water in the toilet tank. If the colored water appears in the bowl, the toilet is leaking.

Repair leaky pipes and faucets. A slow steady drip can waste 350 gallons of water per month. Not only does this wastewater it increases your sewer bill and can increase your energy costs if it is hot water.

Install water conserving faucet aerators and showerheads.

If you do not have a low flow toilet, place a weighted plastic bottle in the tank to displace a portion of the water, taking care to keep the bottle clear of any moving parts.

Take shorter showers or a shower instead of a bath.

Run washing machines and dishwashers only when full.

Use a broom or blower instead of the hose to clean off sidewalks and driveways.

If watering don't water the sidewalks, driveway or street.

If upgrading appliances or plumbing fixtures choose the ones that conserve water. A high efficiency, front loading washing machine can use 30 percent less water than a top loading model.

For more water conservation tips,
visit the NJ Drought website
www.njdrought.org or the Clean
Water Book: Choices for Watershed
Protection website
www.state.nj.us/dep/watershedmgt/
cleanwaterbook/waterbook\_tble.htm

#### **NJ Surface Water Quality Standards Revised**

The New Jersey Department of Environmental Protection is adopting the following policies and criteria relevant to the New Jersey Surface Water Quality Standards to ensure better environmental protection of the waters of the State so that the intended uses of those waters can be met. The Federal Clean Water Act requires the States to update their criteria when new scientific data indicate that the criteria need to be revised to provide adequate protection for human health or aquatic life.

The New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B) are a body of rules and regulations that establish use classifications for the State's waters and set the quality of water necessary to protect human health, aquatic life and other uses. This is done through narrative and numeric criteria.

#### **What's New?**

#### **POLICIES**

Changes to policies within the Surface Water Quality Standards include the designation of all freshwaters for potable water use, protective and more stringent design flows in low stream flow conditions, clear implementation policies for Regulatory mixing zones, additional protection of stream areas around intake pipes for drinking water (1,500 feet upstream and 500 feet downstream), greater protection for threatened and endangered species by prohibition of regulatory mixing zones around discharge pipes where these species are present and prohibition of regulatory mixing zones for new discharges containing certain bioaccumulative and persistent chemicals such as mercury, PCBs and chlordane.

#### **CRITERIA**

In addition, the criteria for certain pollutants have been revised:

**Phosphorus:** The Department retains the numeric criteria: 0.1 ppm (streams), 0.05 ppm (lakes, ponds, reservoirs). However, watershed-specific criteria may be developed through the watershed management planning process. This allows development of criteria which more accurately reflect the chemistry, hydrology and morphology of the stream.

**Total Dissolved Solids:** The present narrative aquatic life protection criterion is retained. Now uses toxicity tests to ensure no adverse impacts to aquatic life.

**Ammonia:** A new criterion, expressed as a formula, to protect early life stages of fish in non-trout waters, during summer months is adopted. Additionally, new freshwater criteria, based on pH and temperature levels of the ambient water, are adopted for the other freshwater classifications and months of the year. Finally, new numeric criteria are adopted for all saline classifications.

**Lead:** New and improved aquatic life protection criteria for freshwater are adopted: 38 ppb (acute), 5.4 ppb (chronic); and for saline criteria: 210 ppb (acute), 24 ppb (chronic).

PCBS: A more stringent criterion of 0.00017 ppb for human health protection is adopted.

#### STREAM CLASSIFICATIONS

Eleven New Jersey streams were sampled and found to be supporting trout. The Department is upgrading those streams to reflect the more stringent trout use identified by stream sampling. The upgrades mean that these waterways must be kept clean to continue to support sensitive species such as Brook and Brown Trout. The waterways to be upgraded are in four river basins in Hunterdon, Morris, Sussex and Warren counties, included are:

#### Delaware River Basin:

Delawanna Creek (Delaware)
Lopatcong Creek (Phillipsburg)
Musconetcong River (Tribs.) (N. of Hackettstown)
Shabbecong Creek (Washington)
Spring Mills Brook (Milford)
Warford Creek (Barbertown)

#### Passaic River Basin:

Mill Brook (Randolph)
Pequannock River (Hardyston)
Russia Brook tributaries (south of Mt. Paul)

#### Raritan River Basin:

Bushkill Brook (Flemington)

#### Wallkill River Basin:

Mud Pond Outlet Stream (Hamburg)

For more information, please contact the Division of Watershed Management, P.O. Box 418, Trenton, New Jersey 08625-0418 or (609) 633-7020. The Surface Water Quality Standards Rule and the adopted amendments are available on the following Website: <a href="https://www.state.nj.us/dep/watershedmgt">www.state.nj.us/dep/watershedmgt</a> and appear in the January 22, 2002 New Jersey Register.



#### **A Greener Thumb:**

#### A Public-Private Partnership for Clean Water

■ by Susan L. Scibilia, Rutgers Cooperative Extension

Rutgers Cooperative Extension was awarded a Federal Section 319(h) nonpoint source pollution grant to assist garden centers in the Passaic River Watershed in delivering low-input lawn and landscape care information to their clientele. The project, now in its final stages, combined the talents of the Morris, Passaic, and Essex County Agents of Rutgers Cooperative Extension with10 garden centers throughout the Passaic River Watershed. These partners used A Greener Thumb Program, featuring a Rutgers Cooperative Extension video, displays, and workshops, to educate consumers and garden center employees on the low-input approach to sustainable landscape care. In addition to the garden centers in the watershed, this popular program was also offered at 10 garden centers outside the watershed area.

Using funds from the grant, Rutgers Cooperative Extension first produced *A Greener Thumb* video, which features low-input tips and techniques from Rutgers extension specialists and county agents. The 30-minute video addresses topics such as pesticide use, proper fertilization techniques, composting, and turf choices for home lawns. Rutgers experts offer simple suggestions on how to maintain a beautiful lawn and landscape, while reducing inputs of water and chemicals.

Rutgers Cooperative Extension county agents used the video to train garden center employees so they might better understand the underlying principles of low-input lawn and landscape care and therefore better inform their customers about these issues. The garden centers also received course packets and resource guides to assist them in providing accurate information to their customers. Each participating garden center received literature displays containing videos and Rutgers Cooperative Extension fact sheets. The displays were continually restocked and updated with fact sheets on various lawn and landscape topics, with over 28,000 fact sheets distributed over the course of the project. Hundreds of *A Greener Thumb* videos were also distributed.

Survey results from the program suggest *A Greener Thumb* program was highly effective, as it educated homeowners about low-input, sustainable lawn and landscape care at the time when they were most receptive to the information: while they were purchasing landscape products in the garden centers. Two surveys of garden center customers indicated that most customers get their lawn/landscape care information from garden centers, re-emphasizing the importance of garden center-based outreach. Additional survey results indicated the need for this type of outreach: 82% of respondents do not test their soil; 55% fertilize more than once a year; 67% do not aerate their lawns; and 63% believe yard fertilizers and chemicals pose little threat to ground water quality.

This public-private partnership to educate watershed residents about low-input landscape care was successful because it provided information to homeowners when they needed it the most and when it had the most impact. Two project surveys indicate that the majority of homeowners make their purchasing decisions at a garden center, with the assistance of garden center staff. With the assistance of properly educated garden center staff equipped with resource materials, garden center customers can make choices supportive of a low-input, sustainable approach to lawn and landscape care.

For more information on A Greener Thumb, please contact Susan L. Scibilia, Program Associate in Water Quality, Rutgers Cooperative Extension at 732-932-9634 x11 or Scibilia@aesop.rutgers.edu.

For a copy of the video, please call 609-292-2113 or email khoffman@dep.state.nj.us

#### MONMOUTH COUNTY INSTALLS STREAM AND WATERSHE





To increase public awareness and concern for New Jersey's waterways, the Monmouth County Planning Board and Monmouth County Environmental Council have begun implementation of their Stream and Watershed Identification Project. The county first initiated the project in 1999 by preparing a study of potential identification sign designs and placement locations.

In 2001, the Monmouth County Planning Board received a \$5000 grant from the Partnership for the Delaware Estuary to enable the start of the implementation phase of the countywide stream and watershed identification project. As a result, forty-three sets of signs have been installed in the southwestern portion of the county in November and December. The signs denote the name of the tributary crossed and the watershed in which it is located. The streams and rivers in this part of the county include Doctors Creek, Crosswicks Creek, New Sharon Brook, Lahaway Creek, Miry Run and Assunpink Creek. All ultimately drain to the Delaware River and Estuary.

"The identification signs are a valuable tool. They not only provide useful geographic information but also promote a sense of identity among local residents," said Joseph Rettagliata, Chairman of the Monmouth County Planning Board.

Watershed identification signs are appearing all over the state. In an effort to raise awareness that watersheds are everywhere, signs are being placed at watershed boundaries or at stream crossings. The Barnegat Bay Watershed signs were among the first to appear.





#### D IDENTIFICATION SIGNS

"Monmouth County is proud of its rich and diverse history. These signs will help to renew public interest in the historical, cultural, and environmental significance of the county's waterways," added Harry Larrison, Director of the Monmouth County Board of Chosen Freeholders.

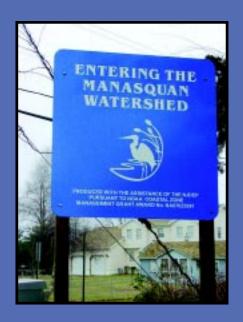
The signs have been erected at county-owned bridges. There are over 300 such crossings in Monmouth County. In the future, the Planning Board hopes to secure additional funds to sign the remainder of the bridges.

As a complement to the project, the Planning Board has published a brochure on stream corridor protection. The latest installment in the county's *Eco-Tips* series, the brochure educates citizens about the importance of healthy stream corridors and describes ways to reduce nonpoint source pollution and practice sound stewardship on their land. The series can be accessed via the Planning Board web site at <a href="https://www.monmouthplanning.com">www.monmouthplanning.com</a>. To obtain printed copies contact Project Manager Harriet Honigfeld at the Monmouth County Planning Board at 732-431-7460.

# WATERSHED MANAGEMENT PROGRAM AT NJWEA CONFERENCE IN MAY

In cooperation with the Watershed Institute, NJDEP Division of Watershed Management and the NJ Water Environment Association, "Thinking Out of the Pipe" Watershed Management Program will feature speakers on topics from the Watershed Management Status Reports, the Clean Water Act, Total Maximum Daily Loads (TMDLs), Outreach and Education, and Stormwater Projects. This year's program will enable attendees to learn from the experienced professional how to best go about implementing projects in their own community or workplace. The two-day program will be held at the Tropicana Casino in Atlantic City on May 1 and 2. The cost to register for both days is \$45. For a complete program, visit www.njwea.org or call 856-583-2370.

State highways crossing the boundaries of the Rancocas Creek (WMA 19) and Upper Mid Passaic, Whippany and Rockaway (WMA 6) feature the Watershed Management heron. Herons are also found on Manasquan and Rockaway River signs.





### Restoring Our Streams

by Patricia L. Hamilton, NJDEP Division of Fish and Wildlife

How often have you admired the beauty of a stream as you drive along a scenic roadway? A traveler's gaze is drawn to the water, hoping to glimpse a fish jumping, a family of ducks playfully splashing, or some other interesting wildlife activity. Streamside landowners often intentionally create vistas by clearing vegetation along a stream bank. A neatly manicured lawn gives them (and us) a pleasant view of the stream and improves fishing and boating access. But is the creation of a park-like setting good for the health of the stream?

Despite its pleasing appearance, this type of landscaping often spells trouble for a stream and its aquatic inhabitants. Take a closer look at the point where land meets water. Still don't see a problem? It may not be obvious unless you stand in the middle of the stream (particularly during the summer, when stream flow is low) and look toward the bank. Inevitably it will be there and quite visible to the naked eye... bank erosion. Expanses of grass growing along stream do a rather poor job of holding soil in place. Its shallow root system is no match for the power of the water currents that result from heavy rainstorms. Little by little, the soil is worn away. In extreme cases, the stream may cut under the bank causing the top-heavy bank to give way as clumps of soil and grass tumble into the stream.



Installation of cedar tree revetments to stabilize an eroding stream bank (Peapack Brook).

Where does this soil go? It is carried downstream by the currents and eventually settles out in areas where the stream is sluggish. Pools and the inside of river bends downstream from an eroding bank are often the unfortunate recipients of this unwanted material. When pools fill in with silt and sediment (fine soil particles) desirable fish habitat is damaged or lost. A fine layer of sediment blanketing the stream bottom can smother bottom dwelling aquatic insects (that fish depend upon for food) and suffocate incubating fish eggs.

How can the damaging effects of stream bank erosion be prevented? Native, wild-growing vegetation (shrubs, trees, and herbaceous plants) should be left to grow along the stream banks. In particular the root structure of shrubby plants (dogwoods, willows and alders) is more complex and holds the soil in place far better than that of grass or even trees. Streamside shade provided by shrubs and trees helps keep water temperatures cool during the hot summer months, a real plus for trout streams. Brushy banks also harbor terrestrial insects that drop into the water and are eaten by fish. When the riparian zone (land adjacent to the stream) is similarly vegetated, then the benefits are far greater. Runoff laden with suspended soil is filtered before it reaches the stream and the stream corridor becomes a more attractive pathway for wildlife (insects, birds, mammals, amphibians and reptiles) because of vegetative cover.

If erosion problems are evident you could opt to let nature take its course in hopes that suitable vegetation will grow and correct the problem. That may happen.... but certainly not overnight. It may take years for a stream bank to recover on its own, if at all. In the meantime damage to downstream areas continues. Concerned landowners can undertake small-scale projects to help speed the recovery process. But rather than tackling the problem by yourself, it is far better to consult with experts from state or federal agencies who can advise you how to best solve the problem. The USDA's Natural Resource Conservation Service (NRCS) has field offices scattered throughout New Jersey with staff that can help develop a sitespecific plan. Bio-engineered solutions, which involve the use of plant and other natural materials to stabilize eroding banks, are often used because the results are a more natural. biologically superior stream bank. Financial assistance for projects is occasionally available through the NRCS's Wildlife

(Restoring Our Streams continued on page 9)

#### **Restoring Our Streams**

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Habitat Incentive Program (*WHIP*) and programs administered by other federal agencies.

Private landowners, fishing clubs, municipal and county environmental commissions and parks, watershed associations, and other nonprofit organizations often express interest in undertaking beneficial streamside projects. In response, the New Jersey Division of Fish and Wildlife and NRCS have teamed up with Trout Unlimited and other agencies and organizations to periodically offer a one-day workshop, aptly called "Restoring Our Streams". During the morning session participants learn from experts, through a series of mini-lectures, about stream ecology, techniques to stabilize stream banks and improve fish habitat, and potential funding sources. In the afternoon the group moves to a streamside location for a hands-on opportunity to apply some of the techniques learned earlier in the day.

In addition, the Division recently created a Fish Habitat Improvement Project (for both streams and lakes) to provide guidance to those interested in improving fish habitat. Educational materials are available and technical assistance may be provided for small improvement projects. Through this project, programs offered by other agencies, and related workshops, individuals and organizations are educated and given the opportunity to contribute to the well being of the aquatic resource. So the next time your gaze is drawn to flowing water, will you see a healthy stream environment or one that needs your help?

Stream
bank
stabilization
project
on
Peapack
Brook
using
brush
mattressing
technique.



#### **Restoring Our Streams:**

#### A Practical Workshop on Stream Restoration -Saturday April 6, 2002

#### Who should attend this workshop?

Streamside property owners, fishing clubs, conservation and watershed organizations, environmental commissioners and consultants, public works and parks departments, landscapers and contractors.

#### What will I learn?

Learn from experts how to solve eroding stream bank problems using native plant materials and improve in-stream habitat for fish. All day instruction includes a hands-on opportunity to apply some of the techniques learned by participating in a stream restoration project. Instruction manual provided to all attendees.

#### For a brochure & registration form contact:

North Jersey RC&D Council, 1322 Route 31 North Box 3, Annandale, NJ 08801-3126 (908) 735-0733 Fax: (908) 735-0744 or visit www.njfishandwildlife.com/strmrest.htm

#### CELEBRATE NEW JERSEY'S WATERSHED AWARENESS MONTH AT A WATER FESTIVAL

Most children in America take water for granted. Yet, without water they would not be able to live more than five days. The NJ Project WET Program is dedicated to educating young people through teachers about the importance and value of water. To celebrate the wonders of water, Project WET is offering mini grants to schools to sponsor a one or two day Water Festival for 200 or more students in grades 3 - 8. Schools will be selected by February 25th and the teachers will be required to attend a Water Festival Planning Workshop on March 2nd.

These schools are required to also get their local water company, watershed organization or other water resource group involved in their festival. From setting up an exhibit to organizing an interactive learning station, there are many ways for people to support and participate in their community's water festival. To learn about the Water Festivals in your area, please email or call Colleen Gould at 732-292-4672 or cgould@superlink.net.

#### Wallkill in the Spotlight

by Ambrosia Collier, DWM Northwest Bureau

The Wallkill River Watershed, located in the northwest tip of New Jersey in Watershed Management Area 02, has been drawing attention to its watershed protection and enhancement efforts. In November 2001, the Wallkill River Watershed Coordinator, Nathaniel Sajdak, was a guest speaker in a televised forum on the health of the Wallkill River, which took place at the Sussex County Community College in Newton. Not only was it well received, but it also showed how far the Wallkill River Watershed Management Project has come since the formation of the Wallkill River Watershed Public Advisory Committee (PAC) just a year earlier. Today, the Wallkill River Watershed has its own logo, web site, newsletter, GIS workstation, and 15 roadway watershed signs.

The NJ Department of Environmental Protection (NJDEP) has been working closely with the Wallkill River Watershed stakeholders, including the Sussex County Municipal Utilities Authority and the northwestern New Jersey business, agricultural, and educational communities, in a partnership to respect and care for the area's water resources. Public input and support are essential for the preparation and ultimate implementation of a Wallkill River Watershed Management Plan. To that end, the PAC and its four work committees (Education and Outreach, Land Use, Technical Advisory [TAC], and Coordinating) have been very diligent in the establishment of mission statements and objectives, an assessment of data needs, and the development of work plans. Meetings have been held consistently each month to report on progress, to work on the next action items, and to engage all stakeholder groups and interested watershed residents.

Public interest in the Wallkill River Watershed has been noteworthy, if turnout at numerous watershed events is any indicator. For example, the Wallkill Watershed Walks, which are designed to get people out of the meeting room and into the field, have been well attended, ranging between 30 and 50 participants each time. Nathaniel Sajdak, who developed the Wallkill Watershed Walks Program, organizes and conducts the walks along the Wallkill River and its tributaries to provide in the field instruction about watersheds, nonpoint source pollution, and volunteer stream monitoring using RATs and BATs. Other events included last April's Wallkill Watershed Clean-up Day conducted at two locations, tours of the Sussex County Municipal Utilities Authority Upper Wallkill Wastewater Treatment Facility, and participation in the Wallkill River National Wildlife Refuge Dedication Ceremonies, Vernon Earthfest, and the Sussex County Farm and Horse Show. Credit for their success is due in large part to the energies of the Education and Outreach Committee, which was created to educate and encourage participation in protecting, maintaining, and enhancing the Wallkill River Watershed. In addition, the AmeriCorps Watershed Ambassador conducts extensive education and outreach to the watershed community particularly to schools by using a hands on watershed model to address the concepts of watershed management and nonpoint source pollution. In addition, the Watershed Ambassador conducts field investigations throughout the watershed.

As for upcoming activities, the Land Use Committee is involved with developing an open space criteria work plan. The TAC is working on implementing a sampling program as well as preparing numerous technical plans that will support watershed protection. Finally, besides its many ongoing community services, the Education and Outreach Committee is busy preparing for a springtime watershed event and another in early summer. So, expect lots of continued excitement and attention on the Wallkill River Watershed that can only benefit this high quality watershed and its users.

For more information, please contact Donna Sheridan or Ambrosia Collier in the Northwest Bureau at 609-633-3812.



#### **Lower Raritan Hosts a Municipal Forum**

The Lower Raritan Municipal Forum was held on December 5, 2001. The agenda for the forum included a variety of topics including surface and ground water supply and protection, water resources protection, stormwater management and flooding, and open space preservation. Speakers included Middlesex County Freeholder Camille Fernicola, NJDEP DWM Raritan Bureau Chief Kerry Kirk Pflugh, NJWSA Executive Director Thomas Baxter, NJWSA Director of Watershed Programs Dan Van Abs, consultants, representatives of non profit organizations such as Morris Land Conservancy and the Association of New Jersey Environmental Commissions, and the Ten Towns Great Swamp Watershed Management Committee. Lower Raritan WMA Steering Committee Chair Michael Rogers, Watershed Restoration Subcommittee Chair William Kruse and Watershed Restoration/Education & Outreach Subcommittee member Steve Barnes also spoke.

Over 50 people attended the forum, including representatives from 12 municipalities, non-profit organizations, utilities and consultants. The evaluations received from attendees indicated the participants felt the presentations were very informative and enlightening. Additionally, the Lower Raritan has added new participation from municipalities. Several subcommittees have indicated their interest in having some of the speakers attend subcommittee meetings to provide more detailed presentations in the future.

During summer 2001, the Watershed Management Area 9 Lower Raritan subcommittees discussed the need for information about how municipalities were managing various water resources. The decision was made to send out a survey to municipalities, and to hold a forum to disseminate the information gained. The survey was designed by a planning subcommittee, and was sent out to municipalities in mid-September. Topics on the survey included surface and ground water supply and protection, surface and ground water pollution, aquifer recharge, stormwater management, stream corridor protection and restoration, farmland and forests preservation, open space for water resources and land use management. Municipalities were asked to provide information regarding the priority the issue is given within their towns, actions that have been taken, how effective the actions were and what more needs to be done about that issue. Responses were received from 18 municipalities and 1 county. North Jersey Water Supply Authority staff compiled the results, and with the assistance of the planning subcommittee, put together a set of desired topics and speakers for the forum.

For more information on the Lower Raritan Municipal Forum please contact Kathy Hale at khale@raritanbasin.org or 732-356-9344.

# REVISED LAKES MANUAL AVAILABLE

The 2001 edition of Managing Lakes and Reservoirs is now available. This manual was designed for lake users and owners who are interested in managing their lake to achieve a higher degree of water quality. It provides a thorough description of what makes a lake function, yet it presents it in such a way that people who don't have any science background will be able to learn the most important fundamentals associated with lake water quality. The manual is one of the best resources available for interested citizens.

The manual is available from the North American Lake Management Society website bookstore at www.nalms.org/bkstore/p2-01.htm for \$33.95 plus shipping and handling. The manual can also be ordered for free from EPA's National Service Center for Environmental Publications at 1-800-490-9198. Ask for EPA publication #841-B-01-006. The document is also online at New Jersey's Environmental Digital Library at njedl.rutgers.edu





This watershed boundary in Brick Township (Ocean County) lets you know that "You are leaving the Barnegat Bay Watershed" and "Entering the Manasquan Watershed." For more see page 6.

#### Statewide Watershed Symposium Set for May 14th

The NJDEP Division of Watershed Management will be hosting its first Watershed Symposium during Watershed Awareness Month (May). The symposium will be held at the Trenton Mariott and highlight success stories in watershed management. The morning session will feature reports from across the state by our partners in Watershed Management. The Division's Watershed Management Awards will be presented as well as the Rainstick Contest Winners for elementary school children. The afternoon session will feature mobile workshops to nearby projects and activities.